

## CLAIMS

The following listing of claims shall replace all prior versions, or listings, of claims in this application.

1.-26. (canceled)

27. (currently amended) A chimeric protein comprising:

a first polypeptide sequence which degrades a nerve growth-inhibiting substance while being physically linked to a second polypeptide sequence, wherein the first polypeptide is selected from the group consisting of chondroitinases, hyaluronidases, and matrix metalloproteinases; and,  
a second polypeptide sequence which possesses growth-promoting regenerating activity for neural cells while being physically linked to the first polypeptide sequence; and,  
said first and second polypeptide sequences not occurring together in nature and being joined together in said chimeric protein.

28. (previously presented) The chimeric protein of claim 27 wherein the chondroitinase is selected from the group consisting of chondroitinase ABC exolyase, chondroitinase ABC endolyase, chondroitinase AC, and chondroitinase B.

29. (currently amended) The chimeric protein of claim 27 wherein the second polypeptide sequence is selected from the group consisting of:  
Neural Cell Adhesion molecules (N-CAM), L1, myelin-associated glycoproteins, laminins, fibronectins, cadherins, Tenascins, fibronectin type-III (FN-III) repeats A-D (FnA-D), M1 antibodies, netrins, neural antigen BSP-2 (mouse N-CAM), neural antigen D-2, neural antigen 224-1A6-A1, nerve growth factor-inducible large external glycoprotein (NILE), Nr-CAM, TAG-1 (axonin-1), Ng-CAM, F3/F11, integrins, J1, Fasciclin III, myelin-associated glycoprotein (MAG molecules) and neurotrophic factors.

30. (previously presented) The chimeric protein of claim 29 wherein the neurotrophic factor is selected from the group consisting of neural growth factor (NGF), brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3), insulin-like growth factor (IGF), epidermal growth factor (EGF), vascular endothelial growth factor (VEGF), fibroblast growth factor (FGF), platelet-derived growth factor (PDGF), transforming growth factor alpha (TGF $\alpha$ ) and transforming growth factor beta (TGF $\beta$ ).
31. (previously presented) The chimeric protein of claim 27 further comprising a peptide linker, wherein the first polypeptide is joined to the second polypeptide by the peptide linker.
32. (previously presented) The chimeric protein of claim 31 wherein the peptide linker is an Fc portion of an immunoglobulin.
33. (currently amended) A pharmaceutical composition comprising:  
a therapeutically effective amount of a chimeric protein, and  
~~in combination with~~ a pharmaceutically acceptable carrier,  
wherein the chimeric protein comprises:  
a first polypeptide sequence which degrades a nerve growth-inhibiting substance while being physically linked to a second polypeptide sequence, wherein the first polypeptide is  
selected from the group consisting of chondroitinases, hyaluronidases, and matrix metalloproteinases;  
a second polypeptide sequence which possesses growth-promoting ~~regenerating~~ activity for neural cells while being physically linked to the first polypeptide sequence; and,  
~~a peptide linkage which joins the first polypeptide sequence is joined to and the second~~  
polypeptide sequence by a peptide linkage in the chimeric protein.
34. (previously presented) The pharmaceutical composition of claim 33 wherein the therapeutically effective amount of the chimeric protein is a 1 to 100 micro molar concentration in the plasma.

35. (previously presented) The pharmaceutical composition of claim 33 wherein the therapeutically effective amount of the chimeric protein is 1 to 50 micrograms per kilogram of body weight of a patient in the plasma.